

TITLE VI: PROPERTY AND LAND USE

CHAPTER 5 TALL STRUCTURE -- FORT MADISON

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6-5-1 PURPOSE. Regulates and restricts the height of structures and objects of natural growth in the vicinity of Fort Madison Municipal Airport by creating appropriate zones and establishing boundaries, more specifically:

1. That the creation or establishment of an airport hazard is a public nuisance and an injury to the County served by the Fort Madison Municipal Airport.
2. That it is necessary in the interest of the public health, public safety, and general welfare, that creation of airport hazards be prevented; and
3. That this should be accomplished to the extent legally possible, by proper exercise of the police power; and
4. That the prevention of the creation or establishment of airport hazards, and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which the county of Lee may raise and expend public funds, as an incident to the operation of airports, to acquire land or property interest therein.

6-5-2 DEFINITIONS.

1. Airport. The Fort Madison Municipal Airport.
2. Airport Elevation. The highest point of an airport's usable landing area measured in feet above mean sea level, which elevation is established to be 724 feet.
3. Airport Hazard. Any structure or tree or use of land which would exceed the Federal Obstruction Standards as contained in fourteen Code of Federal Regulations Sections seventy-seven point twenty-one (77.21), seventy-seven point twenty-three (77.23) and seventy-seven point twenty-five (77.25) as revised March 4, 1972, and which obstruct the airspace required for the flight of aircraft and landing or takeoff at an airport or is otherwise hazardous to such landing or take off of aircraft.
4. Airport Primary Surface. A surface longitudinally centered on a runway. When the runway has a specifically prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
5. Airspace Height. For the purpose of determining the height limits in all zones set forth in this ordinance and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.

6. **Control Zone.** Airspace extending upward from the surface of the earth which may include one or more airports and is normally a circular area of 5 statute miles in radius, with extensions where necessary to include instrument approach and departure paths.
7. **Instrument Runway.** A runway having an existing instrument approach procedure utilizing air navigation facilities or area type navigation equipment, for which an instrument approach procedure has been approved or planned.
8. **Minimum Descent Altitude.** The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure, where no electronic glide slope is provided.
9. **Minimum Enroute Altitude.** The altitude in effect between radio fixes which assures acceptable navigational signal coverage and meets obstruction clearance requirements between those fixes.
10. **Minimum Obstruction Clearance Altitude.** The specified altitude in effect between radio fixes or VOR airways, off-airway routes, or route segments which meets obstruction clearance requirements for the entire route segment and which assures acceptable navigational signal coverage only within 22 miles of a VOR.
11. **Runway.** A defined area on an airport prepared for landing and takeoff of aircraft along its length.
12. **Visual Runway.** A runway intended solely for the operation of aircraft using visual approach procedures with no straight in instrument approach procedure and no instrument designation indicated on a FAA approved airport layout plan, a military services approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

6-5-3 AIRPORT ZONES AND AIRSPACE HEIGHT LIMITATIONS.

In order to carry out the provisions of this Chapter, there are hereby created and established certain zones which are depicted on the Fort Madison Municipal Airport Tall Structure Map. A structure located in more than one (1) zone of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. **Airport Height Zones**
 - a. **Horizontal Zone.** The land lying under a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by:
 1. Swinging arcs of 5,000 feet radii from the center of each end of the primary surface of runway(s) 16, 34, 8 and 26, and connecting the adjacent arcs by lines tangent to those arcs.
 - b. **Conical Zone.** The land lying under a surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet. No structure shall penetrate the conical surface in the conical zone, as depicted on the Fort Madison Municipal Airport Tall Structure Map.
 - c. **Approach Zone.** The land lying under a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. (NOTE: an approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end).
 1. The inner edge of the Approach Surface is:

- a. 250 feet wide for Runway(s) 8 & 26.
 - b. 500 feet wide for Runway(s) 16 & 34.
2. The outer edge of the approach zone is:
 - a. 1,250 feet for Runway(s) 8 & 26.
 - b. 2,000 feet for Runway(s) 16 & 34.
3. The Approach Zone extends for a horizontal distance of:
 - a. 5,000 feet at a slope of 20 to 1 for Runway(s) 16, 34, 8 & 26.

No structure shall exceed the approach surface to any runway, as depicted on the Fort Madison Municipal Airport Tall Structure Map.

- d. Transitional Zone. The land lying under those surfaces extending outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the Approach Surfaces.

No structure shall exceed the Transitional Surface, as depicted on the Fort Madison Municipal Airport Tall Structure Map.

- e. No structure shall be erected in Fort Madison that raises the published Minimum Descent Altitude for an instrument approach to any runway, nor shall any structure be erected that causes the Minimum Enroute Altitude to be increased on any Federal Airway in Fort Madison.

6-5-4 USE RESTRICTIONS

Notwithstanding any other provisions of Section III, no use may be made of land or water within Lee County, Iowa in such a manner as to interfere with the operation of any airborne aircraft. The following special requirements shall apply to each permitted use:

1. All lights or illumination used in conjunction with street, parking, signs or use of land and structures shall be arranged and operated in such a manner that it is not misleading or dangerous to aircraft operating from the Fort Madison Municipal Airport or in the vicinity thereof.
2. No operations from any use shall produce smoke, glare or other visual hazards within three (3) statute miles of any usable runway of the Fort Madison Municipal Airport.
3. No operations from any use in Lee County shall produce electronic interference with navigation signals or radio communications between the airport and aircraft.

6-5-5 LIGHTING

1. Notwithstanding the provisions of Section IV, the owner of any structure over 200 feet above ground level must install on the structure lighting in accordance with Federal Aviation Administration (FAA) Advisory Circular 70-7460-ID and amendments. Additionally, any structure, constructed after the effective date of this Ordinance and exceeding 949 feet above ground level, must install on that structure high intensity white obstruction lights in accordance with Chapter 6 of FAA Advisory Circular 7460-ID and amendments.
2. Any permit or variance granted may be so conditional as to require the owner of the structure or growth in question to permit the City of Fort Madison at its own expense to install, operate and maintain thereto such markers or lights as may be necessary to indicate to pilots the presence of any airspace hazard.

6-5-6 VARIANCE. Any person desiring to erect to increase the height of any structure, or to permit the growth of any tree, or otherwise use his property in violation of any section of this Ordinance, may apply to the City of Fort Madison Board of Adjustment for variance from such regulations.

No application for variance to the requirements of this Ordinance may be considered by the Board of Adjustment unless a copy of the application has been submitted to the Fort Madison Airport Commission for an opinion as to the aeronautical effects of such a variance. If the Fort Madison Airport Commission does not respond to the Board of Adjustment within fifteen (15) days from receipt of the copy of the application, the Board may make its decision to grant or deny the variance.

6-5-7 BOARD OF ADJUSTMENT.

1. The Fort Madison Board of Adjustment shall have and exercise the following powers: (1) To hear and decide appeals from any order, requirement, decision, or determination made by the Administrative Agency in the enforcement of this Ordinance; (2) to hear and decide special exemptions to the terms of this Ordinance upon which such Board of Adjustment under such regulations may be required to pass; and (3) to hear and decide specific variances.
2. The Board of Adjustment shall have the powers established in Iowa Statutes, Section 414.12.

6-5-8 JUDICIAL REVIEW. Any person aggrieved, or any taxpayer affected, by a decision of the Board of Adjustment, may appeal to the Court of Record as provided in Iowa Statutes, Section 414.15.

6-5-9 ADMINISTRATIVE AGENCY. It shall be the duty of the Fort Madison Airport Commission and Fort Madison Planning and Zoning Department to administer the regulations prescribed herein. Applications for permits and variances shall be made to the Administrative Authority upon a form furnished by them. Applications required by this Ordinance to be submitted to the Administrative Agency shall be promptly considered and granted or denied.

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